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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,828	01/03/2001	Dennis C. Ferguson	0023-0026	9942

26615 7590 07/14/2004

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EXAMINER	
LEE, ANDREW CHUNG CHEUN	
ART UNIT	**PAPER NUMBER**
2664	

DATE MAILED: 07/14/2004 5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/752,828	FERGUSON ET AL.	
	Examiner	Art Unit	
	Andrew C Lee	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01/03/2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *April 18, 2001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "an abort packet" in claim 2; "a runt packet" in claim 3; "an abort packet preparing element" as in claim 10; "a runt packet preparing element" as in claim 11; "runt analyzer" and "discarding element" as disclosed in claim 21; "an extractor" as in claim 22; " creating an abort packet" as disclosed in claim 25; "creating a runt packet" as disclosed in claim 26; "abort packet element" as in claim 31; "a runt packet element" as in claim 33; " a runt packet determining element" as in claim 35 must be shown or the feature(s) be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. Figure 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). (It is cited from references provided by applicant(s) — S. Merchant's § 4.6 HDLC-32 Data Scrambling (SCR-29) and from IETF RFC 2615 A. Malis §4. X**43 +1 Scrambler Description) A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

- Page 8, line 21, The Offices suggests that "HDLC abort and flag check" should be replaced with "HDLC abort and flag check 80".
- Page 9, lines 9 to 10, the phrase " other elements for processing" is indefinite. The Office recommends the applicant should provide clarification.
- Page 9, line 17, the subject or subject phrase element is missing (sentence incomplete).
- The drawing Fig. 5, "EOR" should be replaced with "XOR". The term is inherently from Logic and computer science.
- Page 8, line 29 " HDLC descrambler 82 is an x^29 +1 self-synchronous scrambler" should be cited and referenced to (S. Merchant: § 4.6 HDLC-32 Data Scrambling (SCR-29), last sentence of the first paragraph "but we tentatively propose the self-synchronizing scrambler corresponding to the polynomial x^29+1."). But the applicant did not.

Appropriate correction is required.

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "an abort packet preparing element" as in claim10; "a runt packet preparing element" as in claim 11;"runt analyzer" and "discarding element" as

disclosed in claim 21; "abort packet element" as in claim 31; "a runt packet element" as in claim 33; " a runt packet determining element" as in claim 35 runt packet, abort packet, .

5. The disclosure is objected to under 37 CFR 1.71, as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. For example, the following items are not understood: "runt abort packet" specified in the specification. In prior art, runt packet or abort packet can be recited. Besides, the disclosure uses " runt abort packet" often in the specification and abstract, "abort packet" and "runt packet" are only disclosed in the claims, but not "runt abort packet".

Applicant is required to submit an amendment which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

A shortened statutory period for reply to this action is set to expire ONE MONTH or THIRTY DAYS, whichever is longer, from the mailing date of this letter.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 2, 3, 10, 11, 18, 21, 25, 26, 29, 31, 32, 35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claimed subject matters — the "an abort packet" as disclosed in claim 2, and "a runt packet" as disclosed in claim 3, the "an abort packet preparing element" as disclosed in claim 10; the "a runt packet preparing element" as disclosed in claim 11; the "the idle time synchronizing packet is a runt packet" as disclosed in claim 18; the " a runt analyzer" and "a discarding element" as disclosed in claim 21; the " creating an abort packet" in claim 25; the "creating a runt packet" in claim 26; the "determining the idle time synchronization packet is a runt packet" as disclosed in claim 29; the "an abort packet element' as disclosed in claim 31; the " a runt packet element" as disclosed in claim 32 ; and the " a runt packet determining element" as disclosed in claim 35 — are not enabling. The disclosure, especially in the drawings, fails to state or teach one of ordinary skill in the art the functions of these claimed subject matters to be implemented. The specified claimed matters are not disclosed clearly in the drawings and described clearly and concisely in the specification

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 4, 6-9, 12, 14-17, 19-20, 22-24, 27-28, 30, 33-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Saunders (US 6,317236 B1).

Regarding claim 1, Saunders discloses the limitations of processing data in a data transmitting system comprising forwarding data for further processing in the data transmitting system when data is being received (column 1, lines 62-65). Generating idle time synchronizing information during idle time when data is not being received, the idle time synchronizing information for synchronizing a data receiving system with the data transmitting system (column 3, lines 27-30); and generating packet information by processing the data and the idle time synchronizing information in accordance with a packet protocol (column 4, lines 10-19).

Regarding claim 4, Saunders discloses method of loading idle time indication information into a data format consistent with the packet protocol (column 4, lines 28-35).

Regarding claims 6, Saunders discloses the limitation of scrambling the idle time synchronizing information (column 2, lines 64-67).

Regarding claims 7, Saunders discloses the limitation of creating network information by processing the packet information in accordance with a transport

protocol; and forwarding the network information to a data receiving system (column 5, lines 2-16; column 8, lines 52-62)

Regarding claim 8, Saunders discloses step of scrambling the packet information (column 2, lines 64-67).

Regarding claim 9, Saunders discloses the limitation of apparatus for processing data in a data transmitting system comprising a data element for forwarding data for further processing in the data transmitting system when data is being received (column 1, lines 62-65) and creating idle time synchronizing information during idle time when data is not being received (column 3, lines 29-30), the idle time synchronizing information for synchronizing a data receiving system with the data transmitting system (column 4, lines 35-38); and a packet processing element for creating packet information by processing the data and the idle time synchronizing information in accordance with a packet protocol (column 4, lines 32-34).

Regarding claim 12, Saunders discloses the limitation of the apparatus comprising a network protocol processing element for loading idle time indication information into a data format consistent with the packet protocol (column 8, lines 55-60; column 10, lines 53-57).

Regarding claim 14, Saunders discloses the limitation of the packet processing element comprising a scrambler for the idle time synchronizing information (column 2, lines 46-54).

Regarding claim 15, Saunders discloses the limitation of comprising a network processing element for creating network information by processing the packet information in accordance with a transport protocol (column 5, lines 2-6) and a data transmission element for forwarding the network information to a data receiving system (column 5, lines 2-16; column 8, lines 52-62)

Regarding claim 16, Saunders discloses the network processing element comprising a scrambler for scrambling the packet information (column 2, lines 64-67).

Regarding claim 17, Saunders discloses the limitation for receiving data at a data receiving system, comprising receiving an idle time synchronizing packet that was generated by a transmitting system during idle time at the transmitting system (column 5, lines 11-16); and synchronizing the receiving system with the transmitting system by processing the idle time synchronizing packet (column 5, lines 21-28).

Regarding claim 19, Saunders discloses the limitation of extracting the idle time synchronizing packet from network transport information (column 11, lines 16-23).

Regarding claim 20, Saunders discloses the limitations of apparatus for receiving data at a data receiving system (column 5, lines 11-13), comprising a receiver for receiving an idle time synchronizing packet that was generated by a transmitting system during idle time at the transmitting system (column 10, lines 12-16); and processing element for synchronizing the receiving system with the transmitting system by processing the idle time synchronizing packet (column 10, lines 17-19; lines 59-63). processing data in a data transmitting system comprising forwarding data for further

Regarding claim 22, Saunders discloses the limitation of the apparatus comprising an extractor for extracting the idle time synchronizing packet from network transport information (column 11, lines 16-23).

Regarding claim 23, Saunders teaches the apparatus of processing element comprising a descrambler for descrambling the idle time synchronizing packet (column 2, lines 55-57).

Regarding claim 24, Saunders discloses the limitation of a method for synchronizing a transmitting system with a receiving system (column 4, lines 10-13) comprising forwarding data from the transmitting system to the receiving system when data is being received by the transmitting system (column 4, lines 16-19); creating an idle time synchronization packet during idle time when the transmitting system is not receiving data (column 4, lines 53-55); forwarding the idle time synchronizing packet to the receiving system (column 57-61); and processing the idle time synchronizing packet at the receiving system to synchronize the receiving system with the transmitting system (column 4, lines 61-64).

Regarding claim 27, Saunders discloses the limitation of step of processing the idle time synchronizing packet includes descrambling the idle time synchronizing packet (column 2, lines 55-57; column 3, lines 27-30).

Regarding claim 28, Saunders discloses the limitation of processing an incoming data stream in accordance with a network protocol (column 5, lines 2-3); and further processing the incoming data stream in accordance with a packet protocol (column 5, lines 3-10).

Regarding claim 30, Saunders discloses the limitation of a system for synchronizing a transmitting system with a receiving system (column 4, lines 41-42) comprising: a data element for forwarding data from the transmitting system to the receiving system when data is being received by the transmitting system (column 4, lines 42-49) and for creating an idle time synchronizing packet during idle time when the transmitting system is not receiving data (column 4, lines 53-55); a forwarding element for forwarding the idle time synchronization packet to the receiving system (column 4, lines 57-61); and a receiver processing element for processing the idle time synchronization packet at the receiving system to synchronize the receiving system with the transmitting system (column 4, lines 61-64) .

Regarding claim 33, Saunders discloses the limitation of the system having the receiver processing element comprising a descrambler for descrambling the idle time synchronization packet (column 2, lines 55-57; column 9, lines 55-56).

Regarding claim 34, Saunders discloses the limitation of the system including a network protocol processing element for processing an incoming data stream in accordance with a network protocol (column 8, lines 55-56); and a packet protocol processing element for further processing the incoming data stream in accordance with a packet protocol (column 8, lines 56-60).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saunders (US 6,317236 B1) in view of Chapman (US P.N. 6128313).

Regarding claim 5, Saunders discloses method of loading idle time indication information into a data format consistent with the packet protocol (column 4, lines 28-35). But he fails to disclose alternately forwarding the idle time synchronization information and idle time indication information. Chapman discloses the limitation of alternately forwarding the idle time synchronization information and idle time indication information (column 3, lines 1-11, Fig. 2). Therefore, it would have been obvious to include in Saunders of alternately forwarding the idle time synchronization information and idle time indication information such as that taught by Chapman in order to have flags detected according to a predetermined bit pattern used in the packet protocol.

Regarding claim 13, Saunders discloses method of loading idle time indication information into a data format consistent with the packet protocol (column 4, lines 28-35). But he fails to disclose alternately forwarding the idle time synchronization information and idle time indication information. Chapman discloses the limitation of alternately forwarding the idle time synchronization information and idle time indication information (column 3, lines 1-11, Fig. 2). Therefore, it would have been obvious to include in Saunders of alternately forwarding the idle time synchronization information

and idle time indication information such as that taught by Chapman in order to have flags detected according to a predetermined bit pattern used in the packet protocol

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C Lee whose telephone number is (703) 305-8086. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (703) 305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ajit Patel
Primary Examiner

ACL 29 June 2004